

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions and listings of claims in the application:

Claims 1-33. (Canceled)

Claim 34. (Currently Amended) ~~The method of claim 33,~~ A method for manufacturing a tyre for vehicle wheels, comprising the steps of:

producing a tyre;

inserting a plurality of metal studs into seats provided in a vulcanization mould;

retaining the plurality of metal studs in the seats;

inserting the tyre into the mould;

closing the mould;

vulcanizing the tyre; and

opening the mould to extract the vulcanized tyre;

wherein the tyre comprises a tread band,

wherein the mould includes means for retaining the plurality of studs in the seats,

wherein, during the step of opening the mould, a predefined degree of clearance exists between lateral portions of each of the plurality of metal studs and one of the respective seats,

wherein a design of the mould allows the plurality of metal studs to partially project from an external surface of the tread band of the vulcanized tyre,

wherein the plurality of metal studs are oriented in a substantially perpendicular arrangement with respect to an external surface of the tread band,

wherein the predefined degree of clearance is such that during the step of opening the mould, the plurality of metal studs maintain the substantially perpendicular arrangement,

wherein the retaining means includes a magnet, which exerts a magnetic force, such that the studs are retained by said magnetic force[[]], and

wherein an abutting shoulder of each stud engages the internal surface of the mould such that the stud never comes into contact with the magnet.

Claim 35. (Currently Amended) The method of claim 34~~3~~, further comprising chemically treating the studs with a bonding agent prior to inserting the plurality of metal studs.

Claim 36. (Currently Amended) The method of claim 34~~3~~, further comprising providing the studs with one or more coating layers.

Claim 37. (Previously Presented) The method of claim 36, wherein at least one of the one or more coating layers is brass or an alloy comprising cobalt, copper, manganese, nickel, or zinc.

Claim 38. (Previously Presented) The method of claim 36, wherein at least one of the one or more coating layers comprises a brass coating layer provided by electrolytic plating.

Claim 39. (Previously Presented) The method of claim 36, wherein at least one of the one or more coating layers comprises a brass coating layer provided by electro-plating.

Claim 40. (Canceled)

Claim 41. (Currently Amended) ~~The method of claim 40,~~ A method for
manufacturing a tyre for a vehicle wheel, comprising:
producing a tyre;
inserting a plurality of metal studs into seats provided in a vulcanization mould;
retaining the plurality of metal studs in the seats;
inserting the tyre into the mould;
closing the mould;
vulcanizing the tyre; and
opening the mould to extract the vulcanized tyre;
wherein the tyre comprises a tread band,
wherein the mould includes means for retaining the plurality of studs in the seats,
wherein, during opening the mould, the plurality of metal studs are not subjected to any
flexural stress,
wherein a design of the mould allows the plurality of metal studs to partially project from
an external surface of the tread band of the vulcanized tyre,
wherein the plurality of metal studs are oriented in a substantially perpendicular
arrangement with respect to the external surface,
wherein, during opening the mould, the plurality of metal studs maintain the substantially
perpendicular arrangement,
wherein the retaining means includes a magnet, which exerts a magnetic force, such that
the studs are retained by said magnetic force[[.]], and

wherein an abutting shoulder of each stud engages the internal surface of the mould such that the stud never comes into contact with the magnet.

Claim 42. (Currently Amended) The method of claim 41~~0~~, further comprising chemically treating the studs with a bonding agent prior to inserting the plurality of metal studs.

Claim 43. (Currently Amended) The method of claim 41~~0~~, further comprising providing the studs with one or more coating layers.

Claim 44. (Previously Presented) The method of claim 43, wherein at least one of the one or more coating layers is brass or an alloy comprising cobalt, copper, manganese, nickel, or zinc.

Claim 45. (Previously Presented) The method of claim 43, wherein at least one of the one or more coating layers comprises a brass coating layer provided by electrolytic plating.

Claim 46. (Previously Presented) The method of claim 43, wherein at least one of the one or more coating layers comprises a brass coating layer provided by electro-plating.

Claim 47. (Canceled)

Claim 48. (Currently Amended) ~~The method of claim 47,~~ A method for manufacturing a tyre for a vehicle wheel, comprising:

producing a tyre;

inserting a plurality of metal studs into seats provided in a vulcanization mould;

retaining the plurality of metal studs in the seats;

inserting the tyre into the mould;
closing the mould;
vulcanizing the tyre; and
opening the mould to extract the vulcanized tyre;
wherein the tyre comprises a tread band,
wherein the mould includes means for retaining the plurality of studs in the seats,
wherein, during opening the mould, the plurality of metal studs are not subjected to
traction caused by friction against the seats,
wherein a design of the mould allows the plurality of metal studs to partially project from
an external surface of the tread band of the vulcanized tyre,
wherein the plurality of metal studs are oriented in a substantially perpendicular
arrangement with respect to the external surface,
wherein, during opening the mould, the plurality of metal studs maintain the substantially
perpendicular arrangement,
wherein the retaining means includes a magnet, which exerts a magnetic force, such that
the studs are retained by said magnetic force[[]], and
wherein an abutting shoulder of each stud engages the internal surface of the mould such
that the stud never comes into contact with the magnet.

Claim 49. (Currently Amended) The method of claim 48~~7~~, further comprising
chemically treating the studs with a bonding agent prior to inserting the plurality of metal studs.

Claim 50. (Currently Amended) The method of claim 48~~7~~, further comprising
providing the studs with one or more coating layers.

Claim 51. (Previously Presented) The method of claim 50, wherein at least one of the one or more coating layers is brass or an alloy comprising cobalt, copper, manganese, nickel, or zinc.

Claim 52. (Previously Presented) The method of claim 50, wherein at least one of the one or more coating layers comprises a brass coating layer provided by electrolytic plating.

Claim 53. (Previously Presented) The method of claim 50, wherein at least one of the one or more coating layers comprises a brass coating layer provided by electro-plating.

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